APPENDIX C

WORKLOAD STANDARDS

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Table 1. Air Toxicology and Epidemiology Section: Toxic Air Contaminants (Including Children's Health)

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist 5.0 Staff Toxicologist 3.0 Associate Toxicologist 1.0 Research Scientist II 1.0 Public Health Medical Officer II $300K/yr contract funds for specialty literature searches. $60K/yr contract funds for organizing and convening an annual symposium on children's health issues.	Develop health effects assessments (including RELs and cancer potency estimates) for TACs. Conduct peer review of documents, respond to public comments, revise documents. Support ARB's identification of TACs. Assist ARB prioritization of candidate TACs for review and existing TACs for health effects assessment. Assess adequacy of existing risk assessment procedures and practices for protecting infants and children's health. Develop appropriate risk assessment methodologies for developing cancer potency factors and RELs adequate for protection of infants and children. Establish and maintain list of TACs that may cause infants or children to be especially susceptible to illness. Conduct symposia with invited scientists on risk assessment methods for protecting infants and children and related issues. Present health effects assessment to ARB at public meetings.	Review toxicology and epidemiology studies (about 100-1,000 studies/chemical). Develop health effects assessments, including dose-response assessments specific for infants and children for 15 TACs/yr. Develop 0.5-1 health effects assessment including quantitative risk assessment for candidate TAC/yr. Develop one biannual report on findings on age-related susceptibility/responses to toxicants. 3-6 public comment periods/yr. (followed by written responses to all comments). 3-6 public meetings/yr. Plan, organize, and hold 1 scientific symposium on children's environmental health and risk assessment issues per year. One report amending the list of TACs that may disproportionately impact children/yr. 3-6 Scientific Review Panel (SRP) meetings/yr. Adopt 15-20 new health values (cancer potency factors, RELs) and one new list formally/yr. 1-4 ARB meetings per year involving TAC issues (either new listing or Airborne Toxic Control Measures).	Based on experience preparing health affects assessments for candidate TACs. Based on experience developing risk assessment methodologies for carcinogens and for non-cancer toxic endpoints. Based on experience evaluating literature and developing health values for toxic air contaminants. Based on experience meeting with and presenting to the SRP. Based on experience in presenting at public meetings and conducting external peer review.

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Table 2. Emerging Scientific/Chemical Issues: Fuels Assessment (Including Children's Health)

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Public Health Medical Officer II 1.0 Associate Toxicologist 2.0 Research Scientist II	Evaluate literature for toxicological effects of pollutants associated with fuel usage to develop testable hypotheses for epidemiological studies. Conduct epidemiological studies on health effects of fuel-related pollutants, particularly on children and other sensitive populations (e.g., elderly, those with pre-existing respiratory illness and asthma). Obtain and review relevant air pollution data. Conduct appropriate statistical analyses. Prepare reports for publication.	Conduct one study every 2-3 years (develop hypothesis, protocol, recruit participants, etc). Review 100-200 papers/yr.	Previous experience in conducting epidemiological studies.

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Table 3. Air Toxicology and Epidemiology Section: Criteria Air Pollutants (Including Children's Health)

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Research Scientist Supervisor II 3.0 Research Scientist II .5 Research Scientist I 1.0 Staff Toxicologist 2.0 Public Health Medical Officer II $250K/yr contract funds to plan, design, and conduct epidemiology studies.	Develop recommendations for Ambient Air Quality Standards protective of infants and children for Criteria Air Pollutants. Evaluate epidemiological, medical, and toxicological data. Conduct scientific and public workshops. Prepare reports describing health impacts of criteria air pollutant. Evaluate data and analyze relative impacts on the health of infants and children. Conduct peer review through AQAC, respond to comments, and revise report. Provide technical support to ARB for board hearings. Conduct epidemiological investigations of health effects of criteria air pollutants. Seek external funding for research. Prepare findings for publication.	Prepare documentation for the recommendation for Ambient Air Quality Standards, including report on health impacts, for 1 criteria air pollutant/yr. Evaluate data for 1 criteria air pollutant/yr for health impacts on infants and children. Review 1,000-5,000 journal articles/chemical/yr. 2-5 scientific and public workshops/yr. Develop 1-3 protocols/yr. for epidemiological studies. Obtain relevant air pollution data for 2-5 chemicals/yr. Conduct 10-20 statistical analyses on associations between air pollutants and health/yr. Prepare 2-3 reports/yr for publication. Prepare 3-6 proposals/yr for external funding (responding to RFPs).	Based on experience in evaluating criteria air pollutants and recommending Ambient Air Quality Standards since 1980. Based on previous experience conducting the East Bay Children's Respiratory health study, and numerous other epidemiological studies.

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Table 4. Air Toxicology and Epidemiology Section: Air Toxic Hot Spots Act and Exposure Assessment (Including Children's Health)

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Associate Toxicologist 2.0 Research Scientist II 1.0 Research Scientist I $90K/yr contract funds for specialty literature searches.	Maintain risk assessment guidelines (e.g., exposure assessment factors and modeling). Evaluate literature and assess utility of data to ascertain unique exposure patterns in children and infants. Obtain raw data to conduct statistical analyses. Convene the children's environmental health workshops. Assess adequacy of existing exposure modeling procedures and practices for protecting infants and children's health. Provide training on risk assessment methods, in particular use of stochastic exposure modeling. Review health risk assessments conducted under AB 2588. Provide technical assistance to the Air Pollution Control Districts to interpret risk assessments. Provide assistance to ARB on implementing AB 2588, including developing software for health risk assessment. Attend public notification meetings.	Review and evaluate 10-100 articles and 1-2 large reports/yr. on exposure patterns among infants and children. Conduct 10-20 statistical analyses/yr. to develop appropriate infant-specific and child-specific exposure factors. Develop 0.5 to 1 document with proposed changes to guidelines (for guidelines maintenance)/yr. 2-4 public meetings attended/yr. 10-50 inquiries on Hot Spots risk assessment methods applications/yr. 1-3 public comment periods/yr. (followed by written response to comments). 5-10 health risk assessments conducted under AB 2588 reviewed/yr.	Based on experience reviewing risk assessment since 1989. Based on previous experience contracting out literature searches/retrievals/ reviews for a large number of chemicals listed under the Hot Spots program. Based on previous experience conducting workshops and symposia in 2000, 2001, and 2002. Based on previous experience contracting outside experts on exposure factors issues.

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Table 5. Air Toxicology and Epidemiology Section: Indoor Air

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Staff Toxicologist 1.0 Associate Toxicologist 1.5 Research Scientist II	Evaluate toxicological, epidemiological, and other relevant literature to assess potential health impacts of indoor air contaminants. Develop indoor air RELs, including quantitative risk assessments, for use in assessing the health impacts of common indoor air pollutants, particularly those associated with use of recycled materials in buildings. Provide input to ARB on indoor air risk assessment. Participate in statewide indoor air oriented projects (e.g., green building), including document development. Conduct public comment periods and external peer review, respond to comments, revise documents.	1-3 RELs for indoor air/yr. 100-1,000 articles reviewed/yr. 1-2 public comment periods/yr. (followed by written response to comments). 10-30 ARB and public inquiries responded to/yr. 10-15 interagency meetings/yr. 1-2 interagency documents (e.g., Green Building standards/reports)/yr.	Based on previous experience in developing indoor RELs. Based on previous experience participating in statewide indoor air-related working groups.

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Table 6. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Community Health Investigations

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Research Scientist Supervisor I 0.5 PHMO III 0.15 PHMO II 1.0 Research Scientist II 0.5 Staff toxicologist $150K/yr contract funds for software development and distribution, site visits and field investigations, short-term investigative team (students, translators), local communications needs for field studies.	Assemble and evaluate existing criteria and guidelines, including BT systems. Develop criteria and guidelines to assure scientific approach and coordination with various agencies. Adapt software systems for PDA/laptop enhanced field investigation and data transfer for rapid case ascertainment and analysis. Conduct studies based on PIRs, PURs, case reports, etc, and at the request of the LHO. Provide toxicological and epidemiological technical assistance to LHO and CACs. Develop training/educational program to state and local agencies. Develop and distribute software for rapid data gathering and analysis. Rapid deployment of field investigators, as contingency.	2criteria and guidelines reviewed. 1-2 criteria/guidelines developed/yr. 1software/yr. 4 software programs deployed to local agencies/yr 1 studies/yr. 3 training/educational programs conducted/yr.	Extensive historical experience since 1980's in conducting these type of studies. Software development has been achieved through similar staffing resources for other programs in OEHHA. Experience with contracts.

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Table 7. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Risk Assessment

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist .2 Research Scientist Supv. I 4.0 Staff Toxicologist	Supervise staff, ensure productivity and meeting timelines. Peer review DPR RCDs and provide written comments. Use RCD results/findings as a basis for pursuing additional health-related studies and for making recommendations to protect human health. Review data waiver requests for making determinations. Peer review DPR TACs, provide written comments, and prepare health-based findings. Provide toxicological support to other agencies: ARB, SWRCB. Identify and review US EPA documents. From analysis of the RCDs and TAC documents, develop toxicological, epidemiological, and exposure assessment studies to answer public health questions. Address special issues (toxicological, exposure assessment, and methodological) and develop peer review guidelines.	4-8 RCDs reviewed/yr. 1-4 TACs reviewed/yr. 1-3 findings on TACs produced/yr 1-25 data waivers reviewed/yr 1-2 of health-related studies/yr. 2-6 special issues addressed/yr.	Experience since 1984 in reviewing and commenting on RCDs. Experience since 1984 in reviewing and making determinations on data waiver requests. Experience since 1987 on reviewing and commenting on TACs. Experience since mid-1980's in evaluating toxicity of pesticides based on public health concerns and environmental contamination (food, water, accidental releases such as toxic spills, pesticide drift).

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Table 8. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Occupational and Public (Community/Residential) Health and Safety

Position(s)	Workload	Workload Standard	Basis for Standard
0.2 Research Scientist Supervisor I 1.5 Staff Toxicologist 0.25 Public Health Medical Officer II (Note: Includes receiving technical support from the Medical Supervision Program staff.)	Identify regulatory needs and work with DPR and others to formulate regulations to prevent acute and chronic occupational disease and community health concerns resulting from pesticide exposures. Review and evaluate the complex scientific basis (toxicology, epidemiology, and exposure assessment) for regulatory standards. Work with DPR and CACs on implementing worker health and safety regulations. Review air monitoring data. Review and approve exposure study protocols submitted by registrants and coordinated by DPR.	2-6 regulations (emergency/permanent) reviewed/developed/approved/yr. 6-12 exposure protocols reviewed/approved/yr. 1-3 monitoring and exposure studies reviewed/yr. Review and evaluate the complex scientific basis (toxicology, epidemiology, and exposure assessment) for regulatory standards, 2-6/yr. (Some reassessments with new data). Review annual air monitoring report. Participate in 2-4 public hearings/yr. Participate in interagency workgroups, 6 -12 meetings/yr.	Based on experience since mid 1980's in illness investigations, scientific review and evaluations, toxicological assessments, and field practices consistent with good worker health & safety practice, and toxicological principles.

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Table 9. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Medical Supervision and Physician Training

Position(s)	Workload	Workload Standard	Basis for Standard
0.2 Research Scientist Supervisor I .6 Public Health Medical Officer II 0.5 Public Health Medical Officer III .5 Staff Toxicologist	Supervise staff, ensure productivity and timeline Provide training on "Pesticide poisoning-recognition and management" to physicians and health professionals Expand training to rural health clinics, medical managers, ER physicians, poison control centers, nurses, and PAs. Develop training DVDs and web-based distance learning sessions. Develop training syllabus for pesticide by classification and exposure outcomes. Develop curriculum on chronic effects of pesticide and the inert ingredients. Sponsor pesticide symposia. Develop/Establish National Center for Physician Education.	Number of physicians trained averages about 500/yr. New curriculum development, 1 set/yr by pesticide classification. New curriculum development, 1 set/yr by chronic toxicity. Sponsor 1-2 symposia/yr. Review and update training syllabus, minor - continuous, major - every 2 yrs. Review and update training curriculum, minor-continuous, major - every 2 yrs. Class materials produced and provided to participants for each training and upgraded as resources permit. Develop pamphlets and announcements of training program (distribute 2,000/yr) Development and update of the Guidelines for Physicians describing the California Medical Supervision Program (every 2-3 yrs). Interact with local and state health officers, environmental programs; attend meetings of health officers association.	Experience in providing physician training since early 1980's. Initiative in early 1990's and results of a survey of physicians in late 1990's provided support. Over the past three years about 1,300 physicians have received direct training.

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Table 10. Pesticide and Environmental Toxicology Section: Pesticide Use and Safety: Pesticide Illness Reporting (PIR)

Position(s)	Workload	Workload Standard	Basis for Standard
0.2 Research Scientist Supervisor I $50K/yr contract funds for software development.	Supervise staff Guide reporting system development and implementation Develop Web-based, geocoded, confidential reporting system. Incorporate medical symptom and treatment info on new system. Modernize and clarify form. Establish pesticide reporting on existing reporting forms provided by DHS for other conditions. Provide training to physician groups and health officers on new system. Develop auto reported and auto analyzed PIR system. Link new PIR system to DPR case investigation reports and local agricultural commissioners' geocoded NOIs. Establish pesticide poisoning cohort. Link PIR data system to lab reporting of ChE testing. Facilitate regulation development of mandatory reporting ChE.	Update and modernized reporting form (single form, multiple pages of questions and instructions). Upgrade system into electronic format (conversion from existing form). Software development (initial development followed by updating every two yrs). System implementation and testing is an ongoing effort. Maintenance of system (i.e., keeping database updated) is an ongoing effort. Review individual PIR forms, 500-1,000/yr. Review overall and update PIR forms every 1-2 yrs. Train physicians on using new system, 100-500/yr. Establish cohorts, 1-2/yr. ChE reporting and development and updating procedure and methods, ongoing effort.	Experience with manual pesticide illness reporting system since early 1980's. Experience in development of illness reporting forms. Experience with environmental and electronic linkage and tracking of illnesses. Experience collaborating with other state departments. Software development has been achieved through similar staffing resources for other programs in OEHHA. Experience with contracts.

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Table 11. Pesticide and Environmental Toxicology Section: Food Safety: Pesticide and Other Chemical Residues

Position(s)	Workload	Workload Standard	Basis for Standard
3.0 Staff Toxicologist $50K contract/yr for collecting data on food and nutrition surveys, time-consuming data summaries with student help.	Review food consumption surveys. Develop dietary risk assessments. Analyze existing research information and promote CA race/ethnic/SES health and nutritional survey, including biomonitoring. Develop population-based pesticide (other chemicals as appropriate) dietary guidance. Promote awareness of chemical toxicity-nutrition interplay. Evaluate dietary data for use in Relative Source Contribution (RSC) computation in PHG development. Develop "reference values" database to compile and manage toxicological reference values.	Review surveys, 3/yr. Identify/prioritize chemicals of concern, 5/yr. Identify/prioritize food of concern, 5/yr. Review/evaluate dietary intake of the above, 1-5/yr. Develop guidelines for assessment, 1-2/yr. Conduct risk assessment, 1-5/yr. Develop guidance for safe food consumption, 1 every 2 yrs. Develop guidance for balancing nutrition vs health risk from food (pesticide and other chemicals in food), 1 every 2 yrs. Develop and maintain database with existing qualified information, ongoing effort. Plan. Develop reference values.	Based on a program of 20 plus years studying pesticides and other chemicals in the environment, including food. Conduct of dietary assessments for pesticides in several food contamination episodes - ethylene dibromide in cereal grains and bakery products, daminozide in apples and apple juice, aldicarb in watermelon and bananas. Conduct of risk assessments for chemicals in food episodes - lead in ceramic ware, selenium in fish and ducks, methylmercury in fish, chloroform in soft drinks. Experience developing drinking water goals for 130 chemicals (using RSCs), since mid-80's. 20 plus years of experience in developing health criteria for drinking water, fish, pesticide, air toxics, waste sites and specific cancer and reproductive endpoints (for drugs, consumer products).

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Table 12. Pesticide and Environmental Toxicology Section: Food Safety: Fish Contamination

Position(s)	Workload	Workload Standard	Basis for Standard
0.5 Senior Toxicologist 3.0 Staff Toxicologist 1.0 Research Scientist II 1.0 Office Assistant $50K/yr contract funds for student assistance in conducting research, data entry, and organizing abstracts/ tables/etc.	Supervise staff, ensure productivity and timelines, coordinate with other programs, develop and manage contracts. Develop consumption advisories for chemicals in fish and wildlife. Perform chemical-specific toxicological studies and research. Maintain current knowledge of methods and QA/QC procedures for data used in developing fish consumption advisories. Collect and organize chemical contaminant data for fish from external monitoring programs into consistent files structures that can be accessed for analysis. Provide toxicological and technical assistance to local and federal governmental entities in human health risks associated with fish contamination and consumption. Conduct workshops explaining advisory recommendations and respond to public inquiries and comments. Generate GIS maps of advisory sites. Develop fact sheets and outreach materials for consumption advisories.	1-7 consumption advisories per year for fish and wildlife contaminated with chemicals from individual water bodies based on review of monitoring reports and methods, toxicity criteria, epidemiology, and exposure analysis. (Note: The number of advisories varies depending on the size of the water body and number of chemicals and fish species that are assessed.) Toxicological analysis of 2-10 chemical contaminants/yr, following the review of 50-500 scientific articles/yr. Address 1-4 special tox/environmental/ public health issues/yr (mercury in fish, dioxin in oysters) following review of specific scientific reports. 1-4 workshops/public meetings/year. Respond to three or more public inquiries per month on chemicals in fish. 1-4 fact sheets/yr for advisories or health effects of specific chemicals. Coordinate with DHS' community outreach activities (continuous). Technical support to DHS regarding toxicological basis of advisories (4/yr). Develop and update education and outreach materials annually. Students prepare time-consuming data summary abstracts and tables. Clerical support – technical document production/revision and submission (includes word processing, logging and tracking, filing and other support functions).	Experience in developing and preparing fish consumption advisories. Experience in conducting risk assessment of fish and wildlife contaminants. Experience interacting with other agencies involved in issues related to fish contamination. Experience in preparing for and coordinating workshops. Experience in developing advisory and educational brochures. Based on experience analyzing databases generated by state programs, developing statistical tools for analysis, developing and operating data management systems, including GIS.

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Table 13. Pesticide and Environmental Toxicology Section: Water Quality: Surface Waters

Position(s)	Workload	Workload Standard	Basis for Standard
0.5 Senior Toxicologist 1.1 Staff Toxicologist 1.0 Research Scientist II	Supervise staff, ensure productivity and timelines, coordinate with other programs, develop and manage contracts. Review Water Board water standards criteria and TMDL documents. Develop statewide water quality criteria or recommend guidelines for water contaminants that bioaccumulate. Perform chemical-specific toxicological studies and research. Identify, review, and evaluate information to select target species, sites, and chemicals for Coastal Fish Contamination Program, Water Board Regional sampling, and other water quality projects. Provide toxicological and technical assistance to local and federal governmental entities in the area of human health assessment criteria relating to water quality. Generate GIS maps of water bodies, sampling sites, and pollution sources. Evaluate methylmercury criteria, methodology, and policies. Develop TBA discharge guidelines.	Review and evaluation of two to five criteria or TMDL documents per year for human health to see that human health risk are assessed correctly. Development and preparation of health risk assessments for water contaminants for two to five projects/yr. Review and evaluation of three to 10 reports submitted per year on fish distribution, prevalence and landings, chemistry data, collection results, and fish consumption surveys. Enter and evaluate annual data for 50-100+ sites, multiple species, and up to 90 chemicals and other variables per species-site combination from Water Board bioaccumulation monitoring programs. Maintain database and plan yearly monitoring. Respond to one or more technical issues concerning health issues for water contaminants per month from Water Board, Regional Boards, or other agencies. Develop TBA discharge guidelines (limited term project). Evaluation of methylmercury tissue criteria, and BAF and translator methodology to implement a discharge policy (limited term project).	Experience in developing water quality assessments. Experience interacting with other agencies involved in issues related to water quality. Experience in conducting statistical analyses and entering data into database. Based on experience analyzing past databases generated by state programs, developing statistical tools for analysis, developing and operating data management systems, including GIS. Experience –in developing sampling plans for statewide and regional monitoring that can be used to generate data to assess exposure and risk from fish consumption. Based on experience of current support provided to SWRCB and 20 years of criteria and guidelines development for chemicals.

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Table 14. Pesticide and Environmental Toxicology Section: Water Quality: Drinking Water

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist 7.0 Staff Toxicologist 3.0 AssociateToxicologist 1.0 Office Technician $150/yr contract funds for specialized technical issues.	Supervise staff, ensure productivity and timelines, coordinate with other programs, develop and manage contracts. Develop PHGs for chemicals in drinking water. Conduct literature searches and review toxicology data for about 90 different chemicals. Update and revise PHGs at least every five years or as new critical data are obtained. Proposition 50 implementation, prioritize and evaluate multi-million dollar grants applications. Develop Action Levels for chemicals in drinking water at the request DHS. Plan, organize, and conduct public workshops on PHGs, accept direct input in meetings with stakeholders, and respond to public comments and questions. Support/outreach to other boards, departments and offices, water utilities, companies, and the public. Develop fact sheets and other outreach materials, including formal presentations.	10 to 20 PHGs/yr (9 PY + additional support from other OEHHA staff). More than 20 risk assessments are currently in progress at different stages of production. 1-2 public workshops/yr, usually on multiple chemicals. Review 1,000-2,000 scientific articles/yr. Internal reviews of 5 or more draft risk assessments/chemical/yr. Written responses to peer review and public comments on PHGs for an average of 10 or more responses/yr per PHG. Meetings with stakeholders several times/yr, upon their request to provide detailed information to OEHHA. Respond to 1 or more public requests for information/month (phone, email, Public Record Act requests, etc.). 1 fact sheet/yr for selected chemicals of high public interest such as MTBE, arsenic, and perchlorate. Prepare and deliver 5 to 10 scientific presentations/yr. Provide technical support and consultation to DHS on criteria development, and review, evaluation and prioritization of grants applications for 2-10 clean drinking water management projects/yr. Develop PHGs on unregulated chemicals for 1-2 chemicals/yr) 0-6 Action levels/year Clerical support- technical document production/revision and submission (includes word processing, logging and tracking, filing and other support functions.	Based on experience in conducting risk assessments for chemicals in drinking water, including 60 PHGs since 1996, and 12 Action Levels since 1991. Based on experience in meeting with a wide variety of external stakeholders, with dozens of presentations over several years. Based on experience in conducting six or more PHG workshops. Based on developing and administering contracts for PHGs since 1996. Proposition 50 is a new unfunded mandate starting in 2003 – workload is based on experience with similar health related evaluations. Based on experience with responses to requests for development of ALs and PHGs

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Table 15. Integrated Risk Assessment Section: Site Assessment: Screening Levels

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Staff Toxicologist 1.0 Associate Toxicologist	Additional work still needs to be done to meet the mandated requirements, including a report on the feasibility of establishing screening numbers to protect water quality and ecological resources for each of the chemicals (HSC §57008(b)(2)). In addition, once comments are received from the three workshops to be held on the screen numbers and the guidance, changes will be needed for the screening levels (HSC §57008(d)). It is anticipated that the Agency will ask for revisions of the screening numbers and for additional screening numbers (HSC §57008(d)). At this time Agency estimates 5 updates and 15 new screening numbers per year considering similar lists from the San Francisco Regional Water Board, with about 120 Environmental Screening Levels, and U.S. EPA, Region 9, with about 580 Preliminary Remediation Goals, which indicate more chemicals need to be assessed.	Determine the feasibility of establishing screening numbers to protect water quality and ecological resources. Revise screening numbers based on comments from workshops (0.2 PY) Work with DTSC and the Water Board to identify screening numbers that need reevaluation and then do the reevaluation (0.2PY). Work with DTSC and the Water Board annually to identify additional screening numbers needed (0.2 PY). Research and evaluate adverse effects to human health and safety of the new chemicals at 10 per year. Identify and analyze contaminant risk assessments prepared by federal or state agencies. Determine the feasibility of establishing screening numbers to protect water quality and ecological resources. Coordinate and conduct public meetings/hearings. Attend meetings. Respond to peer review and public comments (1.2 PY). Reevaluate the methodology used to develop the screening numbers. Changes have been occurring in the vapor intrusion model used in for some chemicals over the last decade and is expected to change in the future (0.2 PY).	Requirements of the law and experience in doing the first 54 chemicals.

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Table 16. Integrated Risk Assessment Section: Site Assessment: Schools

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist 2.8 Staff Toxicologist $35K/yr contract funds for developing computer tool (spread sheet) to assist in using the guidance. $40K/yr contract funds to hire outside consultants and student assistants to assist in the update of the compilation of chemicals. $200K/yr contract funds to hire outside consultants and student assistants to assist in the literature search and review and criteria development $112K/yr contract funds to assist in obtaining valid exposure parameters for children.	Supervise Schools Project and related projects including program, personnel, and budget management, developing work plans, overseeing technical work production. Develop numerical health-based guidance for chemicals. Identify data gaps and uncertainties in the risk assessment guidance and actions needed to address them. Identify chemical contaminants that are commonly found at school sites and prioritize based on criteria. Develop criteria for child-specific exposures and physiological sensitivities for ranking chemical contaminants. Develop, publish, and update as needed a guidance document for use by Cal/EPA to assess exposures and health risks at existing and proposed school sites.	Supervision, oversight, review, contract management, and quality control (0.5 PY). Identify 5 chemical contaminants/yr that are commonly found at school sites and determined to be of greatest concern based on the child-specific criteria (0.2 PY). Conduct literature searches and review articles for priority chemicals. Develop 5 child-specific toxicity criteria/yr to be used with the risk assessment guidance based on a prioritization process (1.5 PY). Identify and addresses data gap issues for up to 5 chemicals/yr in the development of the school site risk assessment guidelines and toxicity criteria (0.2 PY). Identify and address 1-3 issues/yr in need for outside scientific expertise in the area of child activity patterns and physiological parameters. Contract for external services to address issues (0.2 PY). Conduct and prepare toxicological and research studies for the development of appropriate risk assessment guidance and toxicity criteria to assess human health risk to children from exposure to environmental contaminants. Develop, publish, maintain, and update risk assessment guidance documents (0.2 PY).	Based on actual work over the last 3 years.

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Table 17. Integrated Risk Assessment Section: Consumer Products: Fuels

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Associate Toxicologist 1.0 Research Scientist I 1.0 Hazardous Substance Scientist 1.0 Assoc. Govt'l Prog. Analyst $25K/yr contract funds to provide consultant and student assistance in the acquisition, review and summary of literature for usability in the guidance and to help identify data gaps. $50K/yr contract funds for consultants to assist in the review of the data based on the need for specialized expertise.	Develop work plans, establish priorities, coordinate multi-media evaluation for proposed fuel specification regulations and the California Land and Environmental Restoration and Reuse Act. Evaluate toxicology studies, perform research, develop risk assessment models and soil screening levels. Evaluate proposed regulation impact on public health or environment via all environmental pathways, including air, water, and soil. Analyze data and perform in-depth evaluation of collected data; construct a framework for the multi-media, life-cycle evaluation methods, criteria, and guidelines. Develop guidance for evaluating new fuel specifications to assist ARB. Review data submissions (submitted to ARB) on specific fuel additives. Investigate health impacts from using used motor oil as bunker fuel oil.	Supervising the activities of the Integrated Exposure Assessment Unit is a continuous effort (0.5 PY). Perform literature search, identify, compile, and evaluate data for the development of a multimedia evaluation process for fuel specification regulations to determine adverse impact on public health or environment. Identify data weaknesses and gaps (2.5 PY). Maintain and update guidance as needed. Prepare 1- 3 reviews/yr summarizing the analysis framework addressing human exposure from primary and secondary pathways from multiple releases of contaminants associated with production, use, recycling, and disposal of motor vehicle fuels (1.0). Investigate the potential health impacts from the use of used motor oil in bunker fuel to power ships in harbor and electrical generators. Evaluate the volume and geographical locations of motor oil/bunker fuel mixture used in the state. Model the extent of exposure. Analyze health risks relative to only the use of bunker fuel. Further evaluation of other uses of recycled oil (3.0 PY).	Based on experience from current activities and estimations from past activities.

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Table 18. Integrated Risk Assessment Section: Site Assessment: General

Position(s)	Workload	Workload Standard	Basis for Standard
2.0 Staff Toxicologist	Provide toxicology and other scientific expertise to assist regional water quality control boards and regional integrated waste management boards. Provide toxicology and other scientific expertise to assist local governmental agencies in evaluating the cleanup of contaminated sites. Evaluate site-specific health risk assessment for appropriateness and adequacy. Reviews and evaluates risk assessment models and project components and advises on projects.	From 40 to 100 hours per site (1-1.6 PY) for reviewing and evaluating health risk site specific assessments from past, current, or future exposure to on-site workers, residents on or near sites of contamination, or possible future occupants of areas where contaminants may have migrated based on data supplied in site characterization and/or remedial action plans; and prepares comments and/or recommendations. Provide toxicological and technical assistance in the area of human health site risk assessment criteria and methodology (0.2 PY). Consult in the research and interpretation of human exposure information (0.2 PY). Review and evaluate 1-3 risk assessment models and project components/yr. Providing general consultation on projects is an ongoing effort (0.2 PY).	Based on experience and ongoing work on sites. Based on time sheets used to track time and bill agencies.

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Table 19. Border Coordination

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Staff Toxicologist	Assist Cal/EPA's Border Coordinator in general activities to promote scientific and technological environmental health capabilities and resources for the populations at the CA/Mexico border. Serve as the departmental liaison with local U.S. and Mexican governmental entities to facilitate and foster productive working relationships with the public, regulated community, environmental groups, Legislature and all levels of government. Provide risk assessment experience, training, and advice to professionals, officials, community leaders and others along the California/Mexico border. Participate in meetings, conferences and other activities that focus on pollution at the border.	Develop and conduct 1-3 bilingual (English/Spanish) trainings or workshops/yr in toxicology, risk assessment, and other applications in response to environmental and human health issues relating to pollution near the California/Mexico border (0.7 PY). Serve as points of contact to respond to inquiries and identify departmental documents applicable to risk evaluation or toxicology issues (0.1 PY). Attend state, national, and international meetings concerning border issues within the California/Mexico border region (0.2 PY).	All task workloads are based on the experience of the current Staff Toxicologist (Specialist) (Bilingual).

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Table 20. Integrated Risk Assessment Section: Consumer Products: Art Products

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Staff Toxicologist 1.0 Associate Toxicologist 1.0 Staff Services Analyst $100K/yr contract funds for UC laboratory research on exposure routes and uptake of powers, liquids and aerosols specific to art and craft materials.	Review and update existing of art or craft materials that cannot be used in grades K-6 and provide the Department of Education with a list of safe art and craft products. Consult with manufacturers of art supplies, artists' groups, health organizations, and other experts in the field and hold stakeholder and public meetings to exchange information to improve the program's effectiveness and efficiency. Review manufacturers' submissions of product information for completeness, accuracy and adequacy of analytical methods, conformity with Proposition 65 chemical lists, and to identify other problem compounds. Evaluate the exposure and toxicological assessments made by independent assessors for adequacy. Provide certification for new (or existing) products that conform to ASTM D-4236 product standards and the Federal Labeling of Hazardous Art Materials Act.	Review, research and revise art and crafts lists; gather information from manufacturers, nongovernmental organizations, and governmental organization, as well as products that fail to be certified (0.2 PY). Prepare a semiannual update of art and craft products that may be purchased for use in California schools (0.1 PY). Hold up to 6 stakeholder group and 2 public meetings/yr (0.2 PY). Review submission information on 100-200 products/yr (.9 PY). Certification of new products (number will depend on manufacturer's submissions) (0.2 PY). Through in-house literature review and out side research studies develop better ways to assess childhood exposure to art and craft materials used in schools (0.7 PY). Manage and track confidential and proprietary documents submitted for review in the Art Hazards Program by technical staff. Account for fee submissions and reviews done on art products. Develop and maintain analytical tools to ensure program fees are used effectively and efficiently (.7 PY).	Based on estimates of similar work conducted in the past and for other programs in OEHHA addressing health effects issues associated with consumer products.

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Table 21. Emerging Scientific/Chemical Issues: Environmental Protection Indicators for California

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Research Scientist Supervisor I 1.0 Research Scientist I 1.0 Associate Governmental Program Analyst $525K/yr contracts (8 IAA with other Cal/EPA BDOs, DHS, Resources Agency). $225/yr contract for consulting services.	Manage EPIC program. Develop, maintain, update, and improve the environmental indicator system. Coordinate and collaborate with Cal/EPA BDOs, DHS, Resources Agency and other programs to collect or analyze environmental data. Provide technical support to Agency efforts to integrate environmental indicators into planning/management processes. Track, research, incorporate indicators and concepts from other environmental indicator systems. Prepare biannual reports and supplemental reports. Plan, convene, attend public workshops, scientific meetings, or conferences. Provide administrative support to the interagency workgroup and the scientific review panel. Manage data, GIS development/support, conference planning, graphics design, strategic planning.	Ongoing management and supervision of all EPIC-related work (0.5 PY). Develop, maintain and enhance EPIC indicator system and database. It is expected that 80-100 indicators/yr will be evaluated, and about 40-50 of these updated. To enhance the indicator system, 20-24 indicator systems maintained by regional entities, other states, the federal government, international bodies and research organizations will be tracked (0.6 PY). Coordinate with eight government agencies on continuous basis (0.25 PY). Prepare biannual and supplemental reports. In addition to the biannual report, 6-10 issue- or indicator-specific reports/yr are expected to be prepared (0.5 PY). Support to interagency workgroup and scientific review panel. The scientific review panel and the interagency group are expected to meet 2-4 times/yr (0.25 PY). Technical support to Agency (0.5 PY). Information dissemination and outreach (0.4 PY).	Experience managing EPIC program. Experience during the initial years of EPIC in identifying, selecting and developing indicators. Experience in preparing initial EPIC technical report and summary version for the public. Experience working external stakeholders and interagency advisory group. Experience with the Cal/EPA "Results-Based Management System" Project. Experience in convening and attending public/scientific meetings and conferences. Experience with education and outreach activities. Experience providing administrative support for internal and external programs and collaborators.

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Table 22. Reproductive and Cancer Hazard Assessment Section: Cancer Hazard Identification

Position(s)	Workload	Workload Standard	Basis for Standard
0.5 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Associate Toxicologist 1.0 Research Scientist II 1.0 Office Technician 1.0 Office Assistant $125K/yr contract funds for evaluating exposure and toxicological data for prioritizing chemicals, and conducting literature searches for hazard identification documents.	Perform all technical work required for administratively listing chemical carcinogens under Proposition 65, including technical and supporting documentation and required public notices. Prioritize chemicals for evaluation and when necessary evaluate and revise, as appropriate, the prioritization process. Review epidemiology and toxicology data relevant to cancer hazard identification and prepare documentation for consideration by the Carcinogen Identification Committee (CIC). Present findings at CIC meetings. Organize and convene public workshops, comment periods, and respond to public comments. Revise cancer hazard identification guideline documents as new scientific understanding develops that significantly impacts existing guidance. OT prepares complex documents, process and monitor program expenses, and track out-of-state or in-state travel, expense claims, equipment repairs, controlled correspondence, bill analyses, etc.	For administrative listing, review 20-50 technical reports/yr submitted by authoritative bodies, 20-50 state or federal labels/yr formally required for listing, and 1-5 candidate chemicals listed under the Labor Code; develop 5-15 chemical descriptions/yr supporting listing, identifying 10-35 chemicals for listing and noticing, responding to comments from 10-60 reviewers/yr, hold 5-30 meetings/yr with interested parties. The prioritization process requires review of data for 50-250 chemicals/yr, 50-250 supporting documents prepared (including public review drafts and final documents), and responses to comments received from 8-20 public reviewers per 50 prioritized chemicals. Organize and convene 1-3 public workshops and 2-12 meetings/yr with interested parties for prioritization process. Prioritization procedure revision requires 4-6 CIC prioritization workgroup meetings and responses to comments from 4-10 reviewers per policy document. Annually prepare 2-7 cancer hazard identification documents (including public review drafts and final documents); review 1-2 data call-ins, 2-10 submissions by interested parties; hold 2 CIC meetings with multiple presentations and 1-10 meetings with interested parties. Cancer hazard identification guidelines revision requires addressing 1-2 complicated scientific issues/yr, holding 1-4 meetings/yr with external parties and 1-2 public workshops/yr, and revision and peer review of guidelines. Assist program staff in format requirements for technical reports and legislative reports. Keeping inventory, ordering of supplies, equipment.	Based on 13 years of experience putting chemicals forward for listing based on administrative listing mechanisms. Based on 6+ years of experience developing several processes for the prioritization of candidates for listing consideration under Proposition 65, and 6+ years of experience using the current prioritization process. Based on 15+ years of experience in conducting and developing documentation for cancer hazard identification under Proposition 65. Based on previous experience developing guidance for cancer hazard identification.

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Table 22 (concluded). Reproductive and Cancer Hazard Assessment Section: Cancer Hazard Identification			
Position(s)	Workload	Workload Standard	Basis for Standard
	OA provides general office support as filing, ordering supplies, tracking documents, copying, mailing, etc.	repairs, and tracking expenses in an ongoing effort. Copying documents, articles, and filing, microfiche of articles, and documents as required, and other general office support. Back up of the front desk reception, which includes postage on mail, and other clerical duties.	

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Table 23. Reproductive and Cancer Hazard Assessment Section: Development of Cancer Regulatory Numbers and Technical Support to the Attorney General

Position(s)	Workload	Workload Standard	Basis for Standard
.25 Senior Toxicologist 2.0 Staff Toxicologist 1.0 Biostatistician IV .5 Assoc. Toxicologist 0.5 Research Scientist II 1.0 Senior Environmental Research Scientist Specialist $75K/yr contract funds for pharmacokinetic and biologically based modeling.	Develop No Significant Risk Levels ("safe harbors"), which are Proposition 65 regulations for carcinogens. Review and evaluate available toxicology and epidemiology data on identified carcinogens, determine suitability of data for estimating cancer risks, prioritize carcinogens for regulation and publishing in *Status Report*. Conduct dose-response analysis on the highest quality data sets available for selected carcinogens. Determine most appropriate models for estimating cancer risk, considering several complex scientific factors. Based on cancer dose-response assessment, derive NSRLs for listed carcinogens, prepare supporting documentation for each new NSRL, submit to OAL, respond to public comments, revise as appropriate, and adopt final regulation. Provide scientific and technical guidance to the Attorney General's Office.	Conduct dose response analyses and propose 8-16 regulations/yr. Prepare and submit to OAL1-4 initial and final statements of reasons /yr, corresponding to 8-16 regulations. Hold 1-2 public hearings/yr. Hold 1-10 meetings/yr with interested parties. Routine updating and release of *Status Report*1-3 times per year. Technical support to Attorney General includes 4-20 requests for assistance/yr and preparation of 1-10 declarations, testimony, or other formal documentation/yr.	Based on the most recent 2 years of experience developing safe harbor regulations for listed carcinogens. Based on 15+ years of experience providing technical support to the Attorney General on Proposition 65 issues.

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Table 24. Reproductive and Cancer Hazard Assessment Section: Cancer Safe Use Determinations and other Cancer Analyses for Proposition 65 and Other OEHHA Programs

Position(s)	Workload	Workload Standard	Basis for Standard
.25 Senior Toxicologist 1.5 Staff Toxicologist .5 Assoc. Toxicologist 0.5 Research Scientist II	Perform technical analyses in response to requests for safe use determinations (SUD) for listed carcinogens. Perform technical analyses in response to petitions on cancer issues. Develop interpretive guidelines for Proposition 65. Respond to public comments. Provide technical support on cancer risk assessment and hazard identification issues to other OEHHA scientific programs.	OEHHA receives 2-5 submissions and SUD requests/yr for carcinogens. In developing SUDs, 1-6 pre-submission meetings/yr with interested parties are required, including staff preparation for these meetings. Hold 0-1 public workshops and/or 1-5 public hearings/SUD. OEHHA receives 1-5 submissions and interpretive guideline requests/yr. In preparing the guidelines, 1-3 pre-submission meetings with interested parties and staff preparation as well as 0-2 public workshops are required/yr. OEHHA receives 1-3 petitions on Proposition 65 carcinogens/yr and each petition addresses 1-6 complicated technical issues. In preparing responses, 1-3 pre-petition meetings/yr and staff preparation are required. Hold 0-2 public workshops/yr. Annual provision of consultation to other OEHHA programs on cancer risk assessment issues includes 4-10 requests for document review (e.g., PHGs), 1-3 requests for document preparation, 3-8 requests for meetings support, and 4-8 requests for draft inserts for OEHHA reports.	Based on 6+ years of experience evaluating SUD requests and projected increase in the number of future requests from the regulated community. Based on past experience and recent increased interest from the regulated community in seeking interpretive guidelines. Based on 8+ years of experience receiving petitions on cancer issues. Based on past 5 years of experience providing consultation to other OEHHA programs.

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Table 25. Reproductive and Cancer Hazard Assessment Section: Reproductive and Developmental Toxicity Hazard Identification

Position(s)	Workload	Workload Standard	Basis for Standard
.5 Senior Toxicologist 2.0 Staff Toxicologists 1.0 Associate Toxicologists 0.25 Biostatistician IV 0.5 Research Scientist III 1.0 Research Scientist II $125K/yr contract funds for evaluating exposure and toxicological data for prioritizing chemicals, and conducting literature searches for hazard identification documents.	Perform all technical work required for administratively listing chemical reproductive toxicants under Proposition 65, including technical and supporting documentation and public notices. Prioritize chemicals for evaluation and when necessary evaluate and revise the prioritization process. Review epidemiology and toxicology data relevant to reproductive toxicity hazard identification and prepare documentation for consideration by the Developmental and Reproductive Toxicant Identification Committee (DART). Present findings at DART meetings. Organize and convene public workshops, comment periods, and respond to public comments. Revise reproductive toxicity hazard identification guideline documents as new scientific information emerges. Prepare reviews of emerging or controversial issues in reproductive and developmental toxicology.	For administrative listing, review 20-50 technical reports/yr submitted by authoritative bodies, 20-50 state or federal labels/yr formally required for listing, and 1-5 candidate chemicals listed under the Labor Code; develop 5-15 chemical descriptions/yr supporting listing, identifying 10-35 chemicals for listing and noticing, responding to comments from 10-60 reviewers/yr, hold 5-30 meetings/yr with interested parties. The prioritization process requires review of data for 50-250 chemicals/yr, 50-250 supporting documents prepared (including public review drafts and final documents), and responses to comments received from 8-20 public reviewers per 50 prioritized chemicals. Organize and convene 1-3 public workshops and 2-12 meetings/yr with interested parties for prioritization process. Prioritization procedure revision requires 4-6 DART prioritization workgroup meetings and responses to comments from 4-10 reviewers per policy document. Annually prepare 2-7 reproductive toxicity hazard identification documents (including public review drafts and final documents); review 1-2 data call-ins, 2-10 submissions by interested parties; hold 2 DART meetings with multiple presentations and 1-10 meetings with interested parties. Reproductive toxicity guidelines revision requires addressing 1-2 complicated scientific issues/yr, holding 1-4 meetings/yr with external parties and 1-2 public workshops/yr, and revision and peer review of guidelines. Prepare 1-3 issue papers/yr.	Based 14+ years experience in preparation of reproductive toxicity HIDs documents and guidelines. Based on several examples of development of prioritization documents. Based on 14+ years experience in holding public meetings.

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Table 26. Reproductive and Cancer Hazard Assessment Section: Development of Reproductive Toxicity Regulatory Numbers and Technical Support to the Attorney General

Position(s)	Workload	Workload Standard	Basis for Standard
.25 Senior Toxicologist 1.5 Staff Toxicologist 1.0 Biostatistician IV 0.25 Research Scientist III $75K/yr contract funds for dose response analysis and literature searches to support such analyses	Develop Maximum Allowable Dose Levels ("safe harbors" or MADLs), which are regulations for Proposition 65 reproductive toxicants. Review and evaluate available toxicology and epidemiology data on identified reproductive toxicants, determine the suitability of the data for identification of the most sensitive NOAELs of sufficient quality, prioritize reproductive toxicants for regulation and publish this in the *Status Report*. Based on reproductive toxicity dose-response assessment, derive MADLs for listed reproductive toxicants, and prepare supporting documentation for each new MADL. Submit documentation to OAL, respond to public comments, revise as appropriate, and adopt final regulation. Provide scientific and technical guidance to the Attorney General's Office.	Conduct dose response analyses for preparation of MADLs and propose 5-15 new regulations/yr. Prepare and submit to OAL1-4 initial and final statements of reasons /yr, corresponding to 5-15 regulations. Hold 1-2 public hearings/yr. Hold 1-10 meetings/yr with interested parties. Routine updating and release of *Status Report*1-3 times per year. Technical support to Attorney General includes 4-20 requests for assistance/yr and preparation of 1-10 declarations, testimony, or other formal documentation/yr.	Based on the most recent 2 years of experience developing MADLs for reproductive toxicants. Based on 14+ years of experience providing technical support to the Attorney General on Proposition 65 issues.

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Table 27. Reproductive and Cancer Hazard Assessment Section: Reproductive Toxicity Safe Use Determinations and other Reproductive Toxicity Analyses for Proposition 65 and Other OEHHA Programs

Position(s)	Workload	Workload Standard	Basis for Standard
.25 Senior Toxicologist 1.0 Staff Toxicologist 0.25 Biostatistician IV 0.25 Research Scientist III	Perform technical analyses in response to requests for safe use determinations (SUD) for listed reproductive toxicants. Perform technical analyses in response to petitions on reproductive toxicity issues. Develop interpretive guidelines for Proposition 65. Respond to public comments. Provide technical support on reproductive toxicity risk assessment and hazard identification issues to other OEHHA scientific programs.	OEHHA receives 2-5 submissions and SUD requests/yr for reproductive toxicants. In developing SUDs, 1-6 pre-submission meetings/yr with interested parties are required, including staff preparation for these meetings. Hold 0-1 public workshops and/or 1-5 public hearings/SUD. OEHHA receives 1-5 submissions and interpretive guideline requests/yr. In preparing the guidelines, 1-3 pre-submission meetings with interested parties and staff preparation as well as 0-2 public workshops are required/yr. OEHHA receives 1-3 petitions on Proposition 65 reproductive toxicants/yr and each petition addresses 1-6 complicated technical issues. In preparing responses, 1-3 pre-petition meetings/yr and staff preparation are required. Hold 0-2 public workshops/yr. Annual provision of consultation to other OEHHA programs on reproductive toxicant risk assessment issues includes 4-10 requests for document review (e.g., PHGs), 1-3 requests for document preparation, 3-8 requests for meetings support, and 4-8 requests for draft inserts for OEHHA reports.	Based on 6+ years of experience evaluating SUD requests and projected increase in the number of future requests from the regulated community. Based on past experience and recent increased interest from the regulated community in seeking interpretive guidelines. Based on 5+ years of experience receiving petitions on reproductive toxicity issues. Based on past 5 years of experience providing consultation to other OEHHA programs.

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Table 28. Emerging Scientific/Chemical Issues: Gasoline-Associated Air Pollution: Characterization of Cancer and Non-Cancer Health Effects

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Toxicologist 2.0 Staff Toxicologists 1.0 Research Scientist Supv. I 1.0 Research Scientist II $50K/yr contract funds for identifying additional atmospheric transformation products of gasoline exhaust and emissions, for estimating gasoline-attributable concentrations of atmospheric transformation products, and for evaluating exposure and toxicological data on air pollutants associated with gasoline use.	Characterize the cancer and non-cancer health effects of gasoline-associated air pollution in California. Review the chemical and exposure literature and consult with experts to identify air pollutants associated with gasoline use in California. Identify hazards (cancer and non-cancer) of air pollutants associated with gasoline use. Develop and apply toxicity criteria for gasoline-related air pollutants and specific health endpoints (cancer, respiratory toxicity, cardiotoxicity, etc.) to estimated gasoline-attributable pollutant concentrations for a given year and region. Characterize the change in health risks associated with gasoline use to Californians over time.	Estimate gasoline-attributable concentrations of air pollutants on a yearly basis for individual regions within California, based on analysis of emission inventory data and air monitoring data from the California Air Resources Board and other sources. Review 5-20 air toxicants/yr. Review 5-10 toxicants/yr in other environmental media. Review and evaluate 1-2 mixtures/yr. Analyze 1-3 years of air monitoring data to determine gasoline attributable pollutant concentrations. Develop 1-8 toxicity criteria/yr. Perform 2-15 risk calculations/yr. Prepare and submit biannual report characterizing cancer and non-cancer hazards from gasoline associated air pollutants based upon year-specific air monitoring data.	Based on 3+ years experience conducting reviews of the chemical, exposure, toxicology, and epidemiology literature on gasoline associated air pollutants. Based on 2+ years of experience analyzing California air monitoring data and modeled air concentration estimates, emission inventories, etc. Based on extensive experience conducting dose-response assessments for carcinogens under Proposition 65, and 2 years of experience developing toxicity criteria based on chronic respiratory effects of multiple gasoline-associated air pollutants. Based on experience in other programs (e.g. TAC, PHG), which characterizes cancer and non-cancer health effects.

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Table 29. Reproductive and Cancer Hazard Assessment Section: Children's Cancer Guidelines and Assessment

Position(s)	Workload	Workload Standard	Basis for Standard
2.0 Staff Toxicologists 1.0 Research Scientist III 1.0 Biostatistician IV 1.0 Public Health Medical Officer II $400K/yr contract funds conducting workshops, expanding the data base, developing regulatory levels protection of infants and children	Develop guidelines for assessing risk from childhood exposure and revise cancer risk assessment guidelines to be more protective of the fetus, infant, and child. Develop regulatory and advisory levels that account for greater childhood sensitivity. Review, evaluate, and analyze human and animal studies of cancer resulting from exposures at different life stages and compare cancer risk associated with exposures during the life stages. Review new data on cancer mechanisms and age-related differences in exposure and tumor incidence. Develop, validate, and refine cancer dose-response methodology. Develop age-specific dose-effectiveness factors for carcinogens acting by different mechanisms. Respond to public comments. Publish and present findings.	Review and compile data from 200-300 scientific articles/yr. Enter 50-100 cancer data sets/yr. Conduct 50-75 cancer dose-time-response analyses/yr. Test 5-7 cancer dose response models/yr for 40-70 chemical carcinogens. In developing guidelines for greater childhood sensitivity to cancer, consider 10-15 criteria with review of 1-3 criteria/r. Hold 1-2 public workshops/yr. In developing cancer guidance levels protective of children, prepare 5-10 draft documents/yr considering 5-8 proposed regulations depending on volume and complexity of literature analyzed and the volume and complexity of public comments. Submit to OAL 1-2 initial and final statement of reasons /yr. Hold 1-2 public hearings/yr. Hold 2-6 meetings with interested parties/yr.	Based on 3 years of experience reviewing, evaluating, and extracting data from scientific articles presenting cancer findings following carcinogen exposure at different life stages and pilot analyses of data sets on the model carcinogens ENU and DMBA. Based on extensive experience analyzing issues of mechanism of action of carcinogens in hazard identification documents, and previous experience in developing hazard identification guidance. Based on extensive experience developing safe harbors for Proposition 65 carcinogens.

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Table 30. External Affairs: Proposition 65 Implementation

Position(s)	Workload	Workload Standard	Basis for Standard
1.0 Senior Hazardous Substances Scientist 1.0 Associate Governmental Program Analyst	Schedule and provide administrative support for SAB meetings, and for public hearings, workshops, and forums. Draft and submit legal notices announcing public comment periods, chemical listings and other developments of interest to the public. Receive, compile, maintain and distribute copies of public comments received on specific Proposition 65 matters. Promulgate regulations that further the purpose of Prop 65. Staff the Proposition 65 telephone number and respond to public and stakeholder inquiries. Provide program support and coordination between RCHAS, OEHHA counsel and the Executive Office. Maintain and update records on chemicals listed, considered for listing, or prioritized for consideration of listing.	Reserve and set up meeting rooms and arrange for court reporting services for approximately 10 public meetings/yr. Draft 25-50 legal notices per year for publication in the California Regulatory Notice Registry and posting on OEHHA's Web site. Receive, file and disseminate comment letters and attachments covering several dozen chemicals and totaling several thousand pages over a one-year period. Draft regulatory language, Statements of Reasons and related regulatory documents for 1-3 regulatory packages/yr. Handle approximately 3,800 phone calls/yr from the general public and stakeholders. Set up and attend approximately 24 meetings/yr to report developments to, and receive input and direction from, RCHAS, OEHHA counsel and the Executive Office. Continuously maintain files and develop electronic database for 750 listed chemicals and several hundred additional chemicals that are potential candidates for listing.	Based on experience. There is a minimum of 2 Scientific Advisory Board meetings annually, plus additional OEHHA public meetings. Based on experience in managing Proposition 65 workload. Based on OEHHA commitment to enact 25-40 safe harbor numbers annually in regulation, plus OEHHA commitment to clarify and revise existing regulations. Based on experience in staffing the phone line. OEHHA management holds 2 staff meetings monthly to coordinate Proposition 65 activities.